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# *Anti-Essentialism and the Rhetoricization of Knowledge: Mario Nizolio's Humanist Attack on Universals*<sup>\*</sup>

by LODI NAUTA

*Well-known for his Ciceronianism as well as for his crass nominalism and virulent attack on universals, the humanist Mario Nizolio (1488–1567) is often considered to be a forerunner of early modern philosophy. But although his name duly features in general accounts of Renaissance humanism and philosophy, his work, edited by Leibniz in 1670, has hardly been the subject of a philosophically sensitive analysis. This article examines Nizolio's attempt to reform scholastic philosophy, paying particular attention to the way in which he de-ontologized the scholastic categories and predicables (genus, species, etc.) and replaced philosophical abstraction with the rhetorical concept of synecdoche. His views on science, proof, argumentation, and rhetoric are discussed, as well as the humanist inspiration from which they issue. We will then be able to evaluate the strength and limitations of Nizolio's program in the wider tradition of early modern philosophy.*

## 1. INTRODUCTION

Traditionally, historians of philosophy, especially the medievalists among them, have been reluctant to allot any significant role to the humanists in the demise of Aristotelian-scholastic philosophy. The humanists' critique of scholastic terms, terminology, approach, and methods was often couched in such strong polemical terms that it has been all too tempting to dismiss this critique as superficial, unfair, and philosophically irrelevant. The humanists, we are frequently told, simply had a different agenda, pursuing the study of classical antiquity and its languages without an inkling of what a scholastic philosopher (or his modern colleague) really tried to do.<sup>1</sup> For an explanation of the demise of

<sup>\*</sup>I am grateful to two anonymous readers for *RQ* for comments and suggestions.

<sup>1</sup>To give just one recent statement by a distinguished historian of philosophy, Pasnau, 8: "the Scholastics had the great virtue of being relatively uninterested in rhetoric and utterly unconcerned with compromising philosophical rigor for the sake of popular accessibility. They shared the view of the contemporary analytic tradition that the best philosophy will often be technical, difficult, and perhaps comprehensible only to specialists." The sentiment is widespread, also among Renaissance scholars, who often follow the lead of Kristeller, 90–91, 101: "the Italian humanists on the whole were neither good nor bad philosophers, but no philosophers at all." On the absence of humanism — indeed, of Renaissance philosophy in general — from the narrative of Western philosophy, see Hankins, 339.

scholastic thought we must look elsewhere, for example, to the rise of the empirical sciences that showed that new observations of natural phenomena could not be explained by the old paradigm; and also to the development of mathematics, and to what has been called a “hermeneutic hypertrophy,” by which is meant such an immense increase of knowledge of Aristotle’s works and its late-antique and medieval commentators that it led to a watering down of the contours of a once powerful paradigm.<sup>2</sup> It was this combination of external pressure and erosion from inside the Aristotelian-scholastic paradigm, rather than the invectives of the humanists, that resulted in its demise.

There is certainly a lot to be said in favor of this view, but, as this article will argue, it is also a rather one-sided view as it ignores an important philosophical aspect of this humanist tradition of anti-Aristotelianism, a tradition that includes major humanists such as Lorenzo Valla (1406–57), Peter Ramus (1515–72), and Mario Nizolio (1488–1567). Focusing on the interesting but undervalued work of the sixteenth-century humanist Nizolio — whose 1553 *De veris principiis et vera ratione philosophandi contra pseudophilosophos* was edited by Leibniz in 1670 because it was “all the more appropriate for our times”<sup>3</sup> — I will argue that this aspect involves a radical de-ontologization of the conceptual armory of the scholastics, a turn toward the world of empirical things, a recognition of the central role that the human mind plays in our categorization of the world, and a plea for a clear, transparent language in doing philosophy and communication in general.<sup>4</sup> Rejecting universals as essences as well as Aristotelian categories and transcendentals, Nizolio wanted to defend a horizontal ontology in which concrete things, grouped in classes by a creative act of the human mind, take center stage.

This article thus aims at providing a case study of a wider phenomenon, summed up by Stephen Menn in his survey of “varieties of anti-Aristotelianism”: “Aristotelianism had not been nearly as bad as its opponents represented it, and their expectations of what they could

<sup>2</sup>On this last aspect, see Bianchi, 136, who speaks of “una sorta *ipertrofismo ermeneutico*” and makes it clear that we should not ascribe this textual work to humanists only.

<sup>3</sup>Leibniz, 1969, 128; for the Latin, see Leibniz, 1966, 428.

<sup>4</sup>The work was published by Seth Viotto in Parma in 1553; copies are exceedingly rare. No other editions were published before Leibniz’s re-edition, Frankfurt, 1670 (which was reprinted with a new title page in 1674: *Marii Nizolii Anti-barbarus philosophicus sive Philosophia Scholasticorum impugnata Libris IV*). Leibniz’s assessment is to be found in Leibniz, 1966, 401–32: see, for example, 429; translated in Leibniz, 1969, 128. Leibniz, 1966, 408, thinks Nizolio’s title too grand and prefers a title such as “*Logica quaedam reformata et ad puram propriamque loquendi rationem revocata*,” a logic reformed and brought back to a pure and proper account of speech.

accomplish through philosophical tyrannicide were unreasonably high. But though their first steps towards a new philosophy were stumbling and may be compared unfavorably with the accomplishments of late scholasticism, we may see with hindsight that their bold experiments prepared the way for the emergence of mechanical philosophy and science.”<sup>5</sup> To most historians of medieval philosophy this might be too much honor for the humanists, some of whom went out of their way to put Aristotle and the entire *natio peripatetica* in the pillory without much discrimination. But even the most acrimonious skit can contain a serious philosophical point. And we need think only of the staunch critique of scholastic language and concepts by early modern philosophers such as Descartes, Hobbes, and Leibniz to realize that the humanists had hit a philosophical nerve. Not surprisingly, Leibniz took a keen interest in Nizolio, and, arguably, Nizolio's nominalism suggests affinities with Hobbes, or even, to some scholars, with modern linguistic philosophy.<sup>6</sup>

Famous in his own time for his *Observationes in M. T. Ciceronem* (1535), which had already gone through more than fifty editions in the sixteenth century, Nizolio's philosophical work was given serious attention only much later thanks to Leibniz's catholic philosophical interests. The name of Nizolio thus duly features in general accounts of Renaissance humanism and philosophy.<sup>7</sup> In a few perceptive pages Ernst Cassirer praises Nizolio for his emphasis on the concrete world of empirical things and their qualities as the subject matter of scientific investigation, arguing that Nizolio completed “the empirical critique of Aristotelianism” started by his predecessors, and thus “prepared the turn [*Wendung*] of physical science and theory of knowledge” as developed in the dissident natural philosophy of Telesio and others.<sup>8</sup> Recently, Erika Rummel has suggested that Nizolio's

<sup>5</sup>Menn, 47. Of course, humanists also greatly contributed to the recovery, not only of the literary legacy of antiquity, but also of its scientific and philosophical achievements. The study of Stoicism, Epicureanism, Skepticism, and Neoplatonism widened the philosophical horizon, with creative new philosophies — for example, Lipsius's Neo-Stoicism, Montaigne's skepticism, and Gassendi's Epicurean atomism — as a result. Moreover, while humanists often did not pursue a philosophical agenda in the traditional sense, the assumptions and convictions that informed their textual and philological work were anything but philosophically irrelevant.

<sup>6</sup>Tillmann (though only briefly on Nizolio); Glossner. Leibniz, 1966, 424, 428–29, connects Nizolio with Hobbes. On the affinity between Nizolio and Gilbert Ryle's notion of category mistake, see below, n118.

<sup>7</sup>For example, Rossi; Vasoli, 606–32; Copenhaver and Schmitt, 207–09; Breen's introduction to Nizolio, 1956.

<sup>8</sup>Cassirer, 1:151; cf. 2:133–35. In the same spirit, see Kondylis, 115–29, an excellent, brief discussion to which I am much indebted.

work is important “because his emphasis on experience and sense perception marks the transition from the scholastic method and its humanistic alternatives . . . to a more critical scientific method.”<sup>9</sup> However, a more probing and philosophically sensitive analysis and evaluation of his ideas have hardly been attempted.<sup>10</sup> This article aims at doing so. I will start by looking at Nizolio’s humanist credo, which forms the background of his attack on universals. The central part will be an analysis of Nizolio’s criticisms of the traditional five predicables (genus, species, *differentia*, property, accident) by which things were allotted a place in the Tree of Porphyry, and his account of the process of abstraction that led to the formation of these universals. After a brief discussion of proof and demonstration, and the relationship between dialectic and rhetoric, as well as between rhetoric and philosophy, we will be able to evaluate Nizolio’s program and assess the claims that it can be considered as a preparatory step in the slow and gradual downfall of an old paradigm and the emergence of a new one.

## 2. FROM A LINGUISTIC POINT OF VIEW: NIZOLIO’S HUMANIST CREDO

The humanist credo with which Nizolio opened his attack on scholastic philosophy was the expression of a life devoted to the study of classical authors, in particular, Cicero. Born in Boretto in Reggio Emilia in 1488, Nizolio became tutor in the household of the noble family of the Gambara, and it was to Count Giovanni Francesco Gambara that he dedicated his first work, the *Observationes in M. T. Ciceronem* in 1535.<sup>11</sup> Around 1540 he tried to get a post at the University of Milan but lost to Marco Antonio Maioragio, a much younger scholar with whom he exchanged bitter polemics on Cicero between 1546 and 1548. He was almost sixty when, in 1547, he became professor at the University of Parma, and was thus well in his sixties when his *De veris principiis* appeared in 1553. In 1562, already seventy-four years old, he was appointed head of the gymnasium in Sabbioneta by Vespasiano Gonzaga, and died four years later in 1566.

Nizolio’s output is not impressive. Apart from the two principal works, the *Observationes* and *De veris principiis*, he wrote only a few short polemical

<sup>9</sup>Rummel, 159; cf. 162–64, 175–77, 182–83, 188–90.

<sup>10</sup>The small monograph by Wesseler is no exception; see below, n111.

<sup>11</sup>The work was supplemented by new word lists of Nizolio and others; the 1548 edition was entitled *Nizolius sive Thesaurus Ciceronianus*; see Breen’s introduction to Nizolio, 1956, xxiii–xxvi. I have used the 1613 edition, printed in Frankfurt.

works against Maioragio and Celio Calcagnini. As his modern editor, Quirinus Breen, has remarked: "All these writings have a common bond of Ciceronianism."<sup>12</sup> However, Nizolio's reputation as arch-Ciceronian should perhaps be modified. In his style he was no slavish imitator of Cicero.<sup>13</sup> Erasmus's *Ciceronianus* (1528) and the controversies that it and other works sparked may have exercised a "moderating" influence on Nizolio's own Ciceronianism.<sup>14</sup> Unlike J. C. Scaliger and Stephen Dolet, Nizolio did not attack Erasmus, though he must surely have been angered by the *Ciceronianus*, since in his preface to the *Observationes* he already spoke of (unnamed) "detractors" (*obtreptatoribus istis*) of Cicero.<sup>15</sup> His real *bête noire*, however, became Maioragio, whom he had admired earlier in Milan. When Maioragio published his *Antiparadoxa* in 1546 — in which he criticizes Cicero for believing that the Stoic paradoxes are Socratic and for arguing as an orator rather than as a real philosopher — Nizolio felt deeply offended and started what soon became a vitriolic and unedifying polemic, in which the late Calcagnini also became a target. These polemics address a number of issues that recur in the *De veris principiis*. As has been noted by Breen, Nizolio's attack on universals was occasioned by the controversy about the title of Cicero's *De officiis*, a title criticized by Calcagnini, who thought that Cicero should have written *De officio* in the singular.<sup>16</sup> Nizolio defended Cicero by distinguishing between literal and figurative speech. The point seems utterly trivial, but it made Nizolio realize an important point, namely, that a failure to recognize the figure of speech of synecdoche (to use the singular for the plural or part for the whole) had given rise to the errors not only of Calcagnini and the like but also of the many philosophers who believed in the existence of universals. This brings us to his major work, *De veris principiis*.

One of the assumptions in Nizolio's attack on scholastic philosophy is that the scholastics endorsed, almost *tout court*, a realist interpretation of the universals. With the exception of the nominalists, almost all philosophers from the time of Plato and Aristotle onward believed in the existence of universals — whether located in the external world or in the human

<sup>12</sup>Breen's introduction to *ibid.*, xv. Nizolio also published a translation of a lexicon of obsolete words in the Hippocratic writings of Galen. For a good summary of the polemics see Breen's introduction to *ibid.*; Copenhagen and Schmitt, 207–09.

<sup>13</sup>Breen's introduction to Nizolio, 1956, xxi, xlvii, n151; Breen. See Schmitt, 15: "one cannot unequivocally speak of a neat division of Ciceronians and anti-Ciceronians in the Renaissance." See also n26 below.

<sup>14</sup>Breen's introduction to Nizolio, 1956, xxii–xxiii.

<sup>15</sup>Nizolio, 1613, dedicatory page to Giovanni Francesco Gambara (no page number).

<sup>16</sup>Breen's introduction to Nizolio, 1956, liii.

mind — in a way that, in Nizolio's view, is fundamentally mistaken. This belief has wrought so much havoc in philosophy — universals being the foundation of metaphysics and dialectics — that Nizolio sees it as his principal task to eradicate universals once and for all. A discussion of the various scholastic positions is clearly not part of Nizolio's brief. Medieval authors such as Albert the Great, Thomas Aquinas, Duns Scotus, and William of Ockham are mentioned but never discussed.<sup>17</sup> For Nizolio it is enough to bring the scholastic authors under the suitably vague and contemptuous name of "pseudophilosophers." His main targets are the old authorities Aristotle, Boethius, and Porphyry, and also some modern authors such as Joachim Périon (1499–1559), Johannes Rivius (1500–53), Chrysostom Javellus (ca. 1470–1538), Rudolph Agricola (1444–85), and Juan Luis Vives (1492–1540). The latter two are duly praised for their learning and for their critical attitude toward the Aristotelian tradition, yet Nizolio thinks they were still too much under the sway of a belief in universals.<sup>18</sup> Only Lorenzo Valla comes close to Nizolio's own position. Valla had reduced the ten Aristotelian categories to three: substance, quality, and action. He had also reduced the six transcendental terms — being, something, thing, true, good, one — to just one: thing (*res*).<sup>19</sup> And while Valla continued to use the predicable terms, he heavily criticized the Tree of Porphyry for not squaring with reality.<sup>20</sup> Moreover, rhetoric, rather than dialectic, was the queen of arts, and metaphysics was to be dismissed, in particular because of its nefarious influence on theology. According to Nizolio, however, Valla had not eradicated the Aristotelian-scholastic system root and branch, and had lopped off only some branches and leaves.<sup>21</sup> It is left to Nizolio, as he likes to present it, to let the Aristotelian edifice crumble at last by destroying its foundations, that is, universals — and, in their wake, other basic notions such as transcendentals and categories. His radicalism seems unsurpassed: "no other sixteenth-century authors with similar views have so far been identified."<sup>22</sup>

Indeed, Nizolio's aversion to universals does not seem to have been shared by many humanists, who were often able to combine a critical attitude toward traditional philosophy with a belief in universals as a stable

<sup>17</sup>Nizolio, 1956, 1:65 (1.6). Reference will be given to the volume and page number in Breen's edition, followed by book and chapter division in the original. For a German translation, see Nizolio, 1980.

<sup>18</sup>Nizolio, 1956, 1:92 (1.8).

<sup>19</sup>On Valla's program of ontological reduction, see Nauta, 13–125; on Valla and Nizolio, see Monfasani; Mack, 1993, 116.

<sup>20</sup>Valla, 1:48.

<sup>21</sup>Nizolio, 1956, 1:35 (1.2).

<sup>22</sup>Mack, 1993, 116.



structure of essences.<sup>23</sup> We find Nizolio's motivation at the beginning of his work, where he formulates his humanist credo in the form of five principles of "correct philosophizing," much in the spirit of Valla and Vives.<sup>24</sup> Next to having a profound knowledge of the classical languages and their literatures, as well as a sound grasp of rhetoric and grammar, we should avoid senseless questions and use clear language, introducing new expressions and words only if absolutely necessary. And we should follow "the five senses, reason, thought, memory, experience and observation," rather than Plato, Aristotle, or any other ancient or more recent author.<sup>25</sup>

This last principle — number four on Nizolio's list — might seem difficult to square with his reverence for classical authorities, Cicero in particular. The reverence, however, is not absolute, even though Cicero is Nizolio's most important source of inspiration. Cicero himself, as Nizolio does not fail to point out, championed the *libertas philosophandi*. Seeing a matter from various angles, without committing oneself to one particular philosophical school, was essential to Cicero's Academic outlook. Although Nizolio might have felt slightly uncomfortable about Cicero's endorsement of Academic skepticism,<sup>26</sup> he had no doubts about the importance of the *libertas philosophandi*, formulating it in similar terms as "the freedom and true independence to think and judge about all things just as the truth itself and the nature of things require," and rejecting the ancient schools as well as the more recent ones, such as the Albertists, the Thomists, the Scotists, and the Averroists.<sup>27</sup> That the independence from authority was defended by invoking an authority looks inconsistent, but, arguably, the substance of an imperative — "don't follow any authority" or "think for yourself" — is not the same as its support — "Cicero is a good example of someone who thinks

<sup>23</sup>Agricola, 37–41; see Braakhuis; Friedrich. Vives, 1555, 1:582–92; on Vives, see Mack, 2008. Melancthon, 520; cf. Frank, 33–37. For Peter Ramus's indecisive position on universals, see Ong, 208–09.

<sup>24</sup>Nizolio, 1956, 1:21–30 (1.1).

<sup>25</sup>Ibid., 27 (1.1): "non tam Platonem aut Aristotelem aut quempiam alium antiquum neotericumve Scriptorem quam quinque sensus, intelligentiam, cogitationem, memoriam, usum, et experientiam." For similar sentiments in other humanists, see, for example, Valla, 1:1; Vives, 1971, 9. Vives's emphasis on *exploratio*, observation, and induction is well-known: for a brief discussion, including a comparison with Francis Bacon, see F. Watson's preface to Vives, 1971, ciii–cxi.

<sup>26</sup>Schmitt, 72–73, referring to Nizolio, 1956, 2:190, where Nizolio makes a critical remark on the "*Sceptica sive Ephectica et Academica nova*, to which also Cicero belonged, that had confused things greatly and had rendered things uncertain"; in the introduction (ibid., 1:lix) Breen also notes that for Nizolio, Cicero is an eclectic, and that Nizolio himself disagrees with Cicero on a few occasions. On Cicero's skepticism, see Görler.

<sup>27</sup>Nizolio, 1956, 1:26–27: "libertas and vera licentia sentiendi ac judicandi de omnibus rebus ut veritas ipsa rerumque natura postulat."



for himself.” In any case, for Nizolio the contrast is not between reason and authority but between the slavish and uncritical acceptance of just one authority (as members of a particular school are believed to do) and the critical, rational assessment of arguments. There is certainly some rhetorical hyperbole here, but even if Nizolio fell short of this ideal of independent and critical thinking, the formulation of the ideal itself is already of some importance.

Nizolio’s humanist credo clearly forms the background of his campaign against universals, and is reflected by the title: *De veris principiis et vera ratione philosophandi contra pseudophilosophos*. Universals cannot be seen or observed with the senses, being but the product of philosophical abstraction. Together with the categories and transcendentals and a host of other technical scholastic concepts, they form a theoretical superstructure that, according to Nizolio, prevents a clear view of the world of concrete things. As we will see below, this belief in universals is the result of a misunderstanding of language. To be sure, the Ciceronian Nizolio was convinced of the beauty and expressive power of classical Latin, and thus an essential part of his program aims at replacing dialectic with rhetoric and at a defense of the Ciceronian union of eloquence and philosophy, but it also contains a philosophical point that goes beyond merely aesthetic preferences. As his principles already indicate, the language of the great authors of antiquity is closely linked to the language of the common people, the *populus*. The former is of course more refined, ornate, and copious, but it had grown out of the latter.<sup>28</sup>

To us it might seem strange, not to say even contradictory, to call the highly ornate language of the great classical authors common and natural. But since both classical Latin and “our common way of speaking”<sup>29</sup> were contrasted to the artificial, technical, and non-natural language of the scholastics, it was a short step for humanists to blur the distinction between learned Latin and the language of the common people, particularly when such an elision aided in their fight against that scholastic language. They shared the conviction that the linguistic usage of the people reflects the world in a natural way, as opposed to the “unnatural” and “distorted” language of the scholastics.<sup>30</sup> We find, for example, Valla mentioning “the common as well as the learned speech” in one breath, and arguing that in its initial stage Latin was very close to the language of the *vulgus*.<sup>31</sup> This is not to say that classical Latin was always considered to be a direct and unmediated reflection

<sup>28</sup>Ibid., 26 (1.1); 2:80 (3.7).

<sup>29</sup>Ibid., 1:26 (1.1).

<sup>30</sup>Ibid., 147–48 (2.2).

<sup>31</sup>For example, Valla, 1:61: “popularis sermo atque eruditorum”; cf. *ibid.*, 2:485; 1:6. For discussion, see Nauta, 276–80; Tavoni, 207–08.

of the world, for compared both to the vernacular language and to elementary Latin — which still followed the *ordo naturalis*, that is, the order of words close to the vernacular — classical Latin was certainly one or more levels removed from this natural order. Indeed, learning the ornamented prose style of the classical authors was to move, to use the medieval terminology, from the *ordo naturalis* to the *ordo artificialis*.<sup>32</sup> These qualifications were probably not lost on Nizolio, but given his intention to bring science into direct contact with the world of concrete things, it was natural for him to view classical Latin as the common and natural vehicle for expressing our view of the world. The full implication of this conviction becomes clear only later, but already at the start the basic assumption that drives Nizolio's program is that linguistic abstraction and philosophical abstraction are two sides of the same coin: both lead us away from the world of individual, concrete things.

### 3. CLASSES OF WORDS AND THINGS

The attack therefore starts on a linguistic note. General terms such as *man* and *animal* and also terms such as *genus* and *species* themselves are collective terms.<sup>33</sup> The general term *cat* does not refer to a substantial form of cat-hood, let alone a Platonic Idea Cat, but to the class of individual cats, which means no more than all individual cats taken together. Nizolio's argument goes basically as follows. Since words, Nizolio says, were invented to refer to things, we must look at words and word classes to see what there, ontologically speaking, is. Yet his presentation follows a different order: since reality "comes first," he starts with dividing things into four classes with corresponding ways of being, and then introduces four word classes that exactly correspond with these four categories of things.<sup>34</sup> Things can be divided into substances and qualities, and these can either be singular or a multitude (*multitudo*). The four ways of being that correspond to these four classes of things are: independent existence, to exist in something else, to exist on one's own, and to exist in a composite way, that is, to consist of more than one thing.

From an ontological point of view, this is a remarkable categorization for someone who wants to do away with any kind of abstract entity. One would expect Nizolio to have limited his ontology to individual things — that is, individual substances and individual qualities — for unless he erroneously

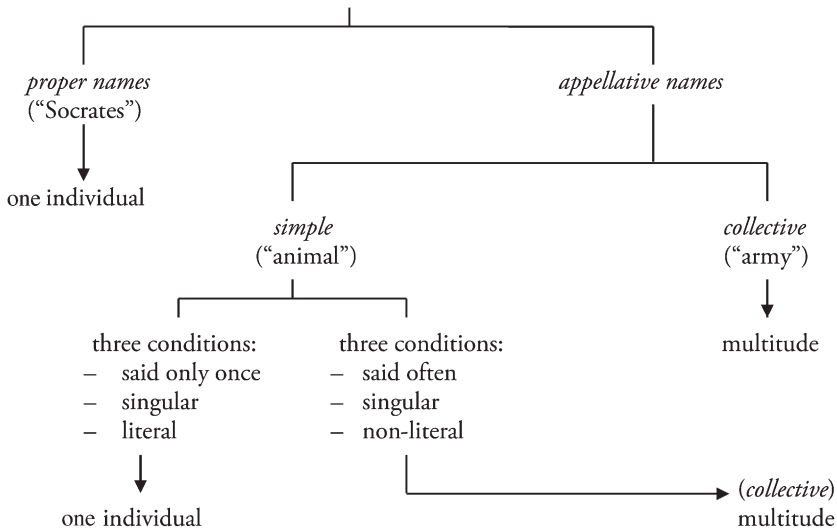
<sup>32</sup>Valla, 2:548: "imperitorum (idest naturaliter loquentium)."

<sup>33</sup>Nizolio, 1956, 1:41–53 (1.4).

<sup>34</sup>Ibid., 37–40 (1.3). Cf. 59 (1.6) where the classes of things, created by "god or nature" ("a Deo sive a natura") are said to be exactly the same in number as "the names and appellations imposed by grammarians and inventors of words" ("linguarum Autores et vocabulorum inventores nomina atque appellationes imposuerunt").

thinks a heap of stones to be of the same ontological order as the class of stones, he willy-nilly introduces an abstract entity: a set or class is of course not the same as a random collection of individuals. As we will see, this ambiguity between groups as multitudes and classes runs right through Nizolio's account. What is clear, however, is that Nizolio's inspiration to come up with this fourfold ontological division is linguistic. There are also four word classes, with corresponding modes of signification: substantives, adjectives, proper names, and appellative names, and each word class refers to an ontological class, for example, substantives to individual things, and so on. The clear aim of these divisions is to categorize universal terms as collective terms.

To develop this point Nizolio accepts the traditional distinction between proper names and appellative names:



Proper names always refer to a concrete individual, even though we can sometimes use the plural to refer to just one individual. An appellative name is defined as a word that is common to many individual things and is said of these things in many statements.<sup>35</sup> Appellative names can be divided into collective names such as *army*, *party*, *folk*, *nation*, *group*, *genus*, and *species*, which always refer to a multitude of individual things, and what Nizolio calls "simple" appellative names, such as *animal*, *human being*, *tree*, and *plant*. The incorporation of *genus* and *species* among the collective names is supported by examples from classical authors who use these words always to refer to groups or classes, for example, Seneca, "everything we suffer as

<sup>35</sup>Ibid., 41–53, esp. 52 (1.4).

a mortal genus [*mortale genus*].” The second category of simple appellative names stands in between collective names and proper names because these words can refer sometimes to individuals and sometimes to groups.<sup>36</sup> For example, “human being” (*homo*) in “Socrates is a human being” refers just to Socrates, when said of Socrates only, but when taken in a non-literal sense (*figurate*), the singular *human being* can also stand for the whole class of human beings. In this case terms such as *animal*, *human being*, and *tree* are collective names.<sup>37</sup> Nizolio singles out three features of this use of simple appellative names: a singular is used instead of the plural, the word is used in a non-literal sense, and such a word is used more than once and in more than one statement.<sup>38</sup> Thus, if used in its literal sense, “living being” (*animal*) in “Plato is a living being” refers to this one individual and is not a collective name. But when used in a series of statements — “man is a living being,” “cow is a living being,” “lion is a living being” — and when used in a non-literal sense, the word is a collective name, referring to the whole class of living beings:

For the names *man* and *animal* and other such words never signify a genus or a species or some common nature except when they are used and accepted figuratively. This [common] nature, which is signified by these figuratively used words, is nothing else but a multitude composed of individuals; and it is a certain discrete whole that truly consists of nothing else but singulars. . . . But if these same names *man* and *animal* are pronounced not just only once, as in the example above, but more often and many times, and are accommodated to different referents, they immediately stop signifying just one thing but signify many and numerous things; thus, for example, when I pronounce the name *animal* many times and accommodate it to diverse referents: “man is an animal,” “cow is an animal,” “lion is an animal.”<sup>39</sup>

<sup>36</sup>Ibid., 42 (1.4).

<sup>37</sup>Nizolio's scheme at the end of *De principiis* (Nizolio, 1956, 2:196) is therefore somewhat misleading, because appellative names seem to be strictly divided into collective and simple names, while many simple names can become collective ones in the way explained by Nizolio in the text. For the same reason, it is confusing that he frequently refers to this category as “simple, non collective [names]” (“simplicia sive non collectiva”); for example, see *ibid.*, 1:42 (1.4).

<sup>38</sup>Ibid., 50 (1.4).

<sup>39</sup>Ibid., 51 (1.4): “Nomina enim hominis et animalis et caetera huiusmodi nunquam significant genus vel speciem, vel aliquam naturam communem, nisi cum sunt figurate posita et accepta, et ea natura, quae his nominibus figurate positis significatur, nihil aliud est, nisi multitudo ex individuis composita et totum quoddam discretum, ex nullis aliis nisi ex singularibus vere constans. . . . Quod si eadem haec nomina hominis et animalis non semel tantum, ut in exemplo superiori, sed saepius ac multoties proferantur, ac diversis suppositis accomodentur, iam statim desinent significare unum tantum, et multorum ac plurium significationem accipient. Ut si quod ad nomen animalis attinet, id multoties proferam et diversis suppositis accomodem hoc pacto, homo est animal, bos est animal, leo est animal.”

Nizolio thus wants terms to refer either to one singular or to a group as a whole — *singillatim aut universe sive in universum*. There is nothing in between: *animal* does not refer to a universal that is one and common at the same time.

Nizolio's account is hardly satisfactory. He suggests that *genus* and *army* are collective names in much the same way: just as an individual soldier is part of a cohort, the cohort part of a legion, and the legion part of an army, so an individual is part of a group of people such as Trojans, this group is part of a wider group, human beings, and this group again part of a still wider group, living beings.<sup>40</sup> Now the term *genus* itself may be a collective name as used by classical authors but a genus-term such as *animal* is clearly different from *army* or *nation*, for while we can say "Socrates is a living being," we cannot say "the soldier is the army." Nizolio mentions the objection but flatly rejects it: genus or species cannot truly (*vere*) be predicated in the nominative of its species or individuals.<sup>41</sup> Thus, in "Socrates is a human being," the term *human being* is not the species when the term is used in its literal sense; it refers just to this one individual. If used metaphorically and in many different statements, it refers to the species.<sup>42</sup> However, the cases remain different, and Nizolio frequently acknowledges this: an army is not a genus, he admits, and yet they are both collective names.<sup>43</sup>

Moreover, Nizolio is not always clear about the criteria to distinguish the literal from the non-literal use of a term. How do we know whether *animal* refers just to Socrates rather than to the whole class of human beings? Some terms, such as *genus* and *species*, are always collective, while other terms, such as *animal*, become collective only after repetition of statements in which they are used in a non-figurative sense: "P is animal," "Q is animal," "R is animal." But Nizolio also states that a term can become collective when used only once, for example, "man" in "Socrates is a man."<sup>44</sup> It seems then

<sup>40</sup>Ibid., 105 (1.10); 42–43 (2.2); see also 93 (1.8): "Both [Socrates and Plato] agree in having the same name *man* and in belonging to the same genus, just as two soldiers belong to the same army" ("Conveniunt enim quatenus ambo [Socrates and Plato] idem hominis nomen habent et in eodem genere hominum tanquam duo milites in eodem exercitu militum continentur").

<sup>41</sup>Ibid., 44 (1.4); 84 (1.7).

<sup>42</sup>Ibid., 43–44 (1.4).

<sup>43</sup>Ibid., 119–20 (2.1).

<sup>44</sup>Ibid., 52 (1.4): "On the other hand, an appellative name, when pronounced many times, signifies, as said, many things; when pronounced only once it signifies only one thing. I speak about its literal meaning here, not about its metaphorical meaning, for when used in its metaphorical meaning a name, even if pronounced only once, signifies many things" ("At nomen appellativum contra, si multoties, ut dixi, proferatur, multorum, si semel tantum, unius tantum habet significationem. De significatione propria loquor, non de figurata, nam figurate positum etiam si semel tantum pronuntietur, tamen multa significat"). But examples of the latter, such as *genus* and *species* themselves were said to be collective terms in their literal sense; see *ibid.*, 42–43 (1.4).

that the term *man* can become collective in two ways, which are not clearly distinguished by Nizolio: (1) after repetition of the term used in its literal sense ("Socrates is a man," "Plato is a man," "Cicero is a man"), so that we know (but how do we know?) that we have to take *man* in its non-literal, that is, figurative sense, and that it refers to the whole group or species; (2) when used only once in its figurative meaning ("Socrates is a man"). Nizolio is unclear on this rather crucial issue, and does not tell us how we know when to take a term such as *man* in its literal and when in its non-literal sense.

These and other difficulties apart, Nizolio's basic idea is clear: terms refer either to one singular or to a group as a whole, as the world consists of things (being the highest class) that can be divided in groups, and these groups further subdivided in groups, down to the level of individuals.<sup>45</sup> Language can easily mislead us into postulating common essences, but with a correct understanding of the use of words — singular/plural, literal/metaphorical, etc. — we can recognize the root of this error.

#### 4. PREDICABLES

But if there are no essences that divide reality at its joints, is any categorization possible and as real as any other? What are the criteria according to which we carve up reality in the way we do? Sometimes Nizolio gives the impression that he considers any categorization as good as any other. To be sure, we tend to group humans with humans, and ants with ants, but we can also group the two together — to use Nizolio's own example — if we take as our criterion "taking precautions for the future," since this is what ants and humans have in common.<sup>46</sup> Whatever common trait we happen to notice among things is sufficient to form a group, a class. On closer inspection of Nizolio's argument, however, it seems that all classes are equal, but some classes are more equal than others. He finds himself speaking of "substantial" and "essential" species.<sup>47</sup> Let's see how.

One strand in Nizolio's thought is to do justice to the basic ontological picture with which he had started. There is just one universal or type of universal: genus, that is, a collection of individual things.<sup>48</sup> We can use

<sup>45</sup>For example, *ibid.*, 190 (2.8): following Valla, Nizolio maintains that there is only one true transcendental: *thing (res)*; *being (ens)* can be reduced to *thing*, just like the other traditional transcendental terms. Everything is a subgroup of *thing*, which is the widest possible class, containing all things. For Valla's position, see Valla, 1:11–21.

<sup>46</sup>For example, Nizolio, 1956, 1:98 (1.9).

<sup>47</sup>*Ibid.*, 141 (2.2); and also 122 (2.1); 139 (2.2).

<sup>48</sup>*Ibid.*, 97 (1.9); 115–34 (2.1).

the term *species* for a smaller collection as part of its genus, but ontologically speaking there are only collections, made up of individual things. Nizolio has to admit, however, that not every collection is a genus. A collection is a genus only when it comprises all the species and individuals that are subordinate to it: the genus tree consists of all species of trees (oak, elm, etc.) and their individuals. Just as genus is defined in terms of its species, so is species defined in terms of its genus, that is, as part of a bigger collection, but it is denied the status of universal, because it is always oriented toward its higher genus.<sup>49</sup> As soon as it is predicated of something subordinate to it, it loses its character of species and becomes a genus, for example, the predicate “man” in “John is a man.” Likewise, man and horse are species of the genus animal, that is, parts of the collection of things that are animal, but as soon as we predicate “man” of “Trojan” or “Theban” — Nizolio’s example borrowed from Cicero’s *De inventione* — it becomes a genus.<sup>50</sup> This also applies to the level of individuals: as soon as *Trojan* is predicated of Koriskos, *Trojan* is the genus and the individual Koriskos its species. Indeed, the *species specialissimae* are not man and horse, as in Porphyry’s tree, but individuals.<sup>51</sup> Nizolio thus seems to de-ontologize genus and species: they seem to be no more than convenient labels for indicating groups and subgroups.

Strange as this position may seem, it is interesting to note that a similar move can be detected in the work of Peter Ramus. As Walter J. Ong suggested a long time ago, Ramus saw, perhaps unconsciously, the world as consisting of little corporeal units, or “simples,” which can be grouped into clusters, and these combined with other clusters, and so forth: “Ramus thus tends to view all intellectual operations as a spatial grouping of a number of these corpuscles into a kind of cluster, or as a breaking down of clusters into their corpuscular units.”<sup>52</sup> All these clusters or groupings are called genera, which leads Ramus to conclude that individuals and species are exactly the same thing.<sup>53</sup> Nizolio does not quote Ramus in his work, but since he frequently refers to Péron’s *Dialecticae libri*, a work that also included

<sup>49</sup>Ibid., 144 (2.2). Cf. Agricola, 54. Nizolio often quotes from and discusses Agricola, something overlooked in Mack’s otherwise excellent survey of Agricola’s influence in the sixteenth century: Mack, 1993, 280–372. Nizolio, 1956, 2:109–10 (4.1), writes about the significance of Agricola’s work when he himself was still a boy (*puer*).

<sup>50</sup>Cicero, 1968, 65 (*De inventione* 1.32): “Often the same thing is a genus in relation to one thing and a species in relation to another. For example, man is a species of animal, but a genus of which Thebans or Trojans are species.”

<sup>51</sup>Nizolio, 1956, 1:140 (2.2).

<sup>52</sup>Ong, 203.

<sup>53</sup>Ramus, 14.



Périon's two orations against Ramus, he may have been acquainted with Ramus's Aristotelian critique. (Ramus's *Dialecticae institutiones* and his *Aristotelicae animadversiones* were published in 1543.)<sup>54</sup> A certain affinity is further visible in Nizolio's argument that man and woman are two different species of the genus human being (*homo*), just as Trojan and Theban are different species of that same genus — a position Ramus also defended. This was a highly unconventional position, the defense of which helped to outlaw Ramism in late sixteenth-century Leipzig.<sup>55</sup> For Nizolio, however, it was a logical outcome of his position that species are parts of genus. He heavily criticizes Vives, who had argued against Cicero that woman and man, just like Trojan and Theban, are only accidental, non-essential qualifications of the species human being; man and woman do not contribute to the essential form, but only concern the "matter." In a remarkable reference to transsexuality Vives had written that people who had changed their sex did not receive thereby a different essence.<sup>56</sup> Nizolio replies that, even though we can make a difference between, on the one hand, non-essential, accidental, or "external" species — such as man/woman and Theban/Trojan of their genus human being — and, on the other hand, essential, "inner and natural" species — such as human being and horse of their genus animal — the former are no less species than the latter, because they can all be considered as subgroups of a larger group, the genus. The relationship between genus and species can thus be "essential" or "accidental": a white wall and a white cloth belong to the genus of white things, yet their inclusion is of an accidental kind since their whiteness is something accidental. But his reply to Vives becomes inconsistent when he says that someone who belonged to the genus human being goes over to the genus woman on changing his sex, for he had started his argument stating that man and woman were two species of the genus human being.<sup>57</sup> It is the same kind of double talk that Ong ascribed to Ramus, and "which drove Ramus's opponents frantic."<sup>58</sup>

<sup>54</sup>In particular, Nizolio's discussion of the authenticity of Aristotle's works in the last book of his *De principiis* suggests an acquaintance with Ramus's *Aristotelicae animadversiones* from 1543; see Breen's note in Nizolio, 1956, 177n37, for some possible links, concluding that it was "praticamente impossibile ch'egli non abbia conosciuto le *Animadversiones* di Ramus." On Périon, see Vasoli, 406n4.

<sup>55</sup>Ong, 203, and n20, from which it appears that this opinion was not yet present in the 1543 edition of Ramus's work, but can be found from 1552 onwards.

<sup>56</sup>Vives, 1:583, quoted by Nizolio, 1956, 1:140 (2.2): "non migrabant ab effectione essentiali in diversam."

<sup>57</sup>Nizolio, 1956, 1:141 (2.2).

<sup>58</sup>Ong, 204.

The admittance of essential versus accidental species looks like a fatal blow to his nominalist program, but Nizolio does not think so. He tries to handle all subordinations of species under genus in purely extensional terms.<sup>59</sup> Horse is an “essential” species of animal because there is no horse that is not an animal, while a white wall belongs only accidentally to the genus white because there are walls that are not white. And a Theban belongs, as human being, essentially to the genus man, but as a Theban only accidentally so. But of course this suggests that all horses (or all humans, etc.) have something in common, which is the reason why we put them in one species subordinated to the genus animal in the first place. Does this not imply the existence of an essence or an essential quality, in other words, a universal? Nizolio does not think so, claiming that the universal simply is the collection of, say, horses or white things. But can we not say then that an army is a genus after all, with the soldiers as individual species? Nizolio must explain what the criteria are to categorize things. This would require, however, a revision of the traditional predicables.

This is indeed what he tries to do. The intention seems to de-ontologize the predicables by suggesting that there are more criteria to categorize things than the traditional five predicables, and that all these criteria are reducible to genera. The *differentia* rational is the class, or *genus differens*, of rational beings.<sup>60</sup> The property (*proprium*) sensation is the class or *genus proprium* of things that have sensation, and so on. The criteria that Nizolio adds are difficult to distinguish from the traditional ones: we can group things because they have something in common (*communio*), for example, having a body, which gives the class of living and non-living things. We can also group things because they are similar, giving the class *genus simile* — for example, ants and humans, both taking precautions for the future — or because they are contrary to each other, such as vice and virtue. More problematic is Nizolio’s introduction of “substantial” as a criterion, giving the class *genus substantiale*, for example, animal for man, since “animal resides [*insitum*] in the substance of man, without which man cannot exist at all.”<sup>61</sup>

Nizolio’s attempt to blur the line between the criteria by which we group things and the class that we get as a result is, of course, highly

<sup>59</sup>Nizolio, 1956, 1:138 (2.2).

<sup>60</sup>Ibid., 115–35 (2.1).

<sup>61</sup>Ibid., 121 (2.1): “alia substantialia, ut animal, quod est genus substantiale homini, est enim animal ita in substantia hominis insitum, ut homo sine animali nullo pacto esse possit; alia accidentalia. . . . Ut in summa sint septem generum subalternorum, sive modi, sive differentiae, sive species, commune sive genus commune, proprium sive genus proprium.”

problematic, but it was perhaps a natural reading of traditional authorities, such as Porphyry and Boethius, which latter writes that “to animal are subordinated the *species* rational and non-rational.”<sup>62</sup> Also, the difficulty of distinguishing clearly between different types of accidents was something that Nizolio inherited from tradition. In Porphyry's *Isagoge*, for instance, it is left unclear how property differs from *differentia* and also from non-separable qualities such as the Ethiopian's blackness, mentioned by Porphyry in his chapter on accidents.<sup>63</sup> Property was defined as what occurs in the entire species, in it only, and always, as the capacity to laugh in man, but the *differentia* rationality would fit this definition equally well.<sup>64</sup> It was, however, a difficulty that Nizolio put to his own advantage in his fight against what he saw as a rigid and hierarchical system of fixed and essentialist predicables.<sup>65</sup> In claiming that all predicables are genera, he denies that there are basic differences between them: they are all the same and only differ, as he states in one of his more polemical moments, “in their relation to what is subordinated or superordinated to them.”<sup>66</sup> Having sensation is a *differentia* dividing plants from animals, but a property when related to the class of living beings, that is, a property shared by rational and non-rational beings.<sup>67</sup>

Evidently, there are some deep tensions in Nizolio's program as analyzed so far, tensions that suggest that it was not easy to employ consistently a purely extensional approach of groups and the individuals out of which they exist. We may note the following points. On the one hand (1), Nizolio singles out “seven or eight” (*septem vel octo*) predicables, which, as we have seen, he identifies with genera (using the traditional Porphyrian term *genera subalterna*), thereby suitably conflating the criteria by which we group things and the groups themselves. But if white is a genus to which, for example, the wall and the cloth belong because they are

<sup>62</sup>Boethius, quoted in Nizolio, 1956, 1:152 (2.3).

<sup>63</sup>Porphyry, 1966, 20.

<sup>64</sup>Warren in Porphyry, 1975, 57n52: “The relations between difference, property, and accident were subject to ambiguity and confusion.” See also Marenbon, 130–31.

<sup>65</sup>Nizolio, 1956, 1:216 (2.11); 160 (2.3).

<sup>66</sup>Ibid., 160 (2.3).

<sup>67</sup>According to Nizolio, definition consists of genus and property rather than genus and *differentia*, implying that there is a clear difference between the two; elsewhere (for example, *ibid.*, 195–205 [2.9]), he accepts the traditional account, which provokes a critical comment from Leibniz (*ibid.*, 162n9 [2.3]): “This is nothing but sophistry (“Hic nihil aliud quam logomachei”). Parenthetically, Leibniz uses the same word *logomachia* (sophistry, playing with words) to denounce some of Spinoza's artificial and obscure terminology: see Laerke, 950.

(accidentally) white, then we can have many more classes, in fact, just as many as there are qualities. Nizolio seems thus to heap together not only groups and criteria — such as having something in common or being contradictory to each other — but also qualities such as whiteness. Indeed, the class of qualities is very broad: not only can we make a genus of, for example, white things, but also one consisting, to give Nizolio's own example, of ants and human beings. This raises the question of the precise ontological status of classes (2). On the one hand, Nizolio defends a horizontal picture of the world: there are only individual things that can be grouped in broader or narrower classes, but they are all at the same ontological level; there is no hierarchy of essences. On the other hand, he clearly distinguishes between individuals and groups, a distinction that seems to give groups their own ontological status, irreducible to the individuals out of which they exist: genera are "eternal" and "immortal."<sup>68</sup>

This leads to a further tension (3): Nizolio argues that the genus is the only universal: as class it is called a thing, that is, a thing of things.<sup>69</sup> Classes are real things in the world. But we also find Nizolio often saying that only words can be general, but neither things nor concepts.<sup>70</sup> What he means is that universals cannot be those mysterious entities that he thinks scholastic philosophers operate with — entities that are not one (for they are predicated of many things), nor many (for it is the same predicate said of different individuals) — but that only words can be general, that is, used to refer to a group of things. He therefore seems to apply the term *universal* to things (that is, genera) but also to words, while he himself repeatedly accuses the "pseudophilosophers" of confusing things and words that refer to things.

The last point (4) is closely related to the previous one. While Nizolio claims to follow the nominalists in stating that only words can be universal,<sup>71</sup> his treatment does not follow the terminist approach of Ockham at all. Ockham had argued that *genus*, *species*, and other universals are nothing but terms of second intention, that is, logical terms.<sup>72</sup> The predicamental order

<sup>68</sup>Nizolio, 1956, 1:43–44 (1.4), where Nizolio says that if one takes away all individuals of a genus the genus vanishes — a traditional point also made by Porphyry, but difficult to square with the view that genera are "eternal and "immortal": *ibid.*, 75 (1.7). For Leibniz's response to this, see the last section of this article.

<sup>69</sup>*Ibid.*, 129 (2.1): "For genera of things are things, not notions" ("Genera enim rerum res sunt, non notiones"). And *ibid.*: "both species and genera of things are true things, not notions" ("tam species quam genera rerum, non notiones sint, sed res verae").

<sup>70</sup>*Ibid.*, 118 (2.1, criticisms of what Nizolio calls the "Stoic" attempt to define genus in terms of concepts).

<sup>71</sup>*Ibid.*, 65 (1.6); 82 (1.7).

<sup>72</sup>For example, Ockham, 1978, 36; Ockham, 1974, 67–71. See also Panaccio, 151–52.

consists not of things but of our mental concepts, which are ordered according to the scope of their predication. Nizolio, however, equates universals with the genera, that is, with things, because he believes only words — neither things nor concepts — can be general in the sense of referring to many things. What he does not seem to realize is that for a nominalist, concepts, being certain intentions of the mind, are singular entities that can stand for many things. It is not surprising, therefore, to find nothing equivalent to Ockham's mental language of our concepts in Nizolio's scheme.<sup>73</sup>

### 5. *COMPREHENSIO* VERSUS ABSTRACTION

But if universals are to be equated with collections of individuals, how do we make these collections? How do we arrive at our categorizations? For Nizolio the central question in the debate on universals becomes all the more pressing: are groups or genera simply a product of the individual human mind, or are they somehow out there in reality, to be reflected in our mind? Nizolio's convictions lead him to embrace — hardly consciously — both positions at the same time. On the one hand, his whole project is aimed at reestablishing a direct contact between the human mind and the world of concrete things. The abstract entities that we are supposed to find hidden in things and then abstract from them are merely the product of the philosopher's imagination and have led us away from the world of concrete things.<sup>74</sup> He must claim that his universals, his genera, constitute reality itself, and indeed we often find him doing so: they are made by nature (*a natura facta*).<sup>75</sup> On the other hand, his de-essentializing program, flattening out the hierarchical picture of his so-called opponents, brings with it a major role for the human mind, which has the capacity to group individuals in many different ways. Such relativism, however, should not be taken too far. Analyzed as substances with their qualities, things are out there, and even though they can be grouped in many different ways, the qualities picked out by the human mind are real aspects of the world and not invented.

<sup>73</sup>Interestingly, Nizolio's source of inspiration, Valla, 1:48, referred to genus and species in terms of "*qualities* of inferiority and superiority"; their relationship being "nothing else than that between a whole and its part": just as species are parts of proximate genus, "so are head and trunk parts of the human body." Strictly speaking, this is even less Ockhamist than Nizolio's account: see Nauta, 37–41.

<sup>74</sup>Nizolio, 1956, 2:79–90 (3.7).

<sup>75</sup>*Ibid.*, 1:78 (1.7).

Nizolio's solution is to substitute abstraction with *comprehensio*, an act of the human mind that gathers together all the individuals of a genus "simultaneously and at once" (*simul et semel*): such genera, taken together, are the subject matter of the sciences and scientific propositions and argumentation. It is a "philosophical and oratorical act," he says, by which he means an act of comparing things and seeing the similarities between them.<sup>76</sup> It is a philosophical act, since it plays an important role in philosophy, where definitions are based on similarities between things: when we define a human being as a rational, mortal animal we thereby define the whole class of human beings, that is, all men and women, on account of their similarities. In spite of his professed hostility to everything Aristotelian, Nizolio is indebted to Aristotle for this crucial notion, and he approvingly quotes from Aristotle's *Topics*, where the importance of an examination of likeness for deductions, inductions, and definitions is stressed.<sup>77</sup> What is said of one member of a class applies to all of them on account of the similarities noticed, or "comprehended."<sup>78</sup> It is an "oratorical act" because we find the trope of using the singular instead of the plural — or part instead of the whole, or one thing instead of a plurality or the entire group — often used by orators, poets, and prose writers. It is what rhetoricians call *intellectio*, or synecdoche, but it is not something limited, Nizolio stresses, to refined literate language or orations.<sup>79</sup> Also in daily speech (*sermo quotidianus*) common people (*populus, vulgus*) use this figure, when they use singular for plural, part for whole, or one thing for a multitude or an entire class (or vice versa).<sup>80</sup> Synecdoche seems to be the linguistic expression of *comprehensio*: in order to talk about a class or group of things one must be able to gather mentally all its individuals.<sup>81</sup>

<sup>76</sup>Ibid., 2:80 (3.7): "Est ergo nostra haec, quam dicimus, comprehensio vere philosophica et oratoria, nihil aliud nisi actio quaedam sive operatio intellectus nostri qua mens hominis singularia omnia sui cuiusque generis simul et semel comprehendit, et de eis ita comprehensio artes omnes et scientias tradit, ratiocinationes, et caeteras argumentationes generales facit."

<sup>77</sup>Aristotle, 1:180–81 (*Topics* 108a37–b31).

<sup>78</sup>Nizolio, 1956, 2:80 (3.7).

<sup>79</sup>Ibid., 1:46 (1.4).

<sup>80</sup>Ibid.: "singularis pro plurali et unus pro pluribus vel omnibus ponitur, aut pluralis pro singulari et plura vel omnia pro uno usurpantur. . . . Quod genus non Oratores modo ornat, sed etiam quotidiani sermonis usus recepit. Haec Quintilianus de Intellectione sive Synecdoche figura, qua non solum Poetas et Oratores, sed etiam homines vulgo communiter loquentes uti testatur." Cf. 41 (1.4): "a Scriptoribus atque etiam a vulgo"; Quintilian, 3:435–37 (*Institutio oratoria* 8.6.19–20).

<sup>81</sup>Nizolio, 1956, 2:80 (3.7); Cicero, 1976, 2:85 (*De oratore* 3.27.106) and 1:295–97 (*De oratore* 2.31.135), quoted by Nizolio, 1956, 1:74 (1.7).

But what exactly is *comprehensio*? Nizolio does not give us any details. It does not seem to be a process but rather an instantaneous grasp of a group, as he compares it to seeing a herd.<sup>82</sup> The idea seems to be that when, for example, a biologist speaks about bats he is talking about the entire class of bats, taking all bats simultaneously together, all at once. Science is not about essences or universals that must first be abstracted from the concrete objects, but it is about these objects themselves, or rather about the genera in which they are grouped.<sup>83</sup> Knowledge is primarily to be had of groups or classes. But here too Nizolio's account is not wholly nominalist, in spite of his claim to follow the *nominales*. According to Ockham, a universal such as *dog* is produced in the mind on seeing a dog and noting its essential feature.<sup>84</sup> This similitude can then stand for all the objects resembling each other and this concept. Though it is a particular act of the mind it can stand universally for all its referents, by virtue of its resemblance to each of them. Nizolio, however, does not accept any kind of abstractionist account of knowledge, and places universals outside the mind: they are the genera out there, comprehensively understood by the scientist, the orator, or whoever speaks about the world, making categorizations and statements about them and about their mutual relations.<sup>85</sup>

But does Nizolio not simply beg the central issue? To claim something about bats is to talk about the class of bats, about all individual bats taken together. But on the basis of what do we take them together? It is tempting to give an answer along Ockhamist lines: we take them together because we have gone through a process of abstraction before, abstracting the essential feature of bats and using that feature as our mental concept and as a natural sign to stand for each individual bat. Nizolio's revolt against abstraction makes such an answer impossible, and though he assigns an important role

<sup>82</sup>Nizolio, 1956, 1:72 (1.7).

<sup>83</sup>Ibid., 2:82–84 (3.7).

<sup>84</sup>Ockham, 1974, 57–65; see also Panaccio, 119–43. A very simplified version is presented by Melanchthon, 520: species are called “acts of cognizing, portraying an image in the mind, which we call common because it can be applied to many individuals” (“revera actus intelligendi, pingens illam imaginem in mente, quae ideo dicitur communis, quia applicari ad multa individua potest”). Melanchthon then equates Aristotle's species with Plato's Ideas, and they are said to be perpetual, “because the knowledge or definition of a rose remains in the mind, even in wintertime . . . and it is one and true and perpetual definition” (“quia rosae noticia seu definitio manet in mente, etiam in hyeme . . . et una est uera ac perpetua definitio”).

<sup>85</sup>Also, Nizolio's notion of *comprehensio* is wholly different from Ockham's notion of intuitive cognition. Intuitive cognition gives us direct and correct information about the existence of an object, while Nizolio's *comprehensio* is a mental act by which we grasp individual things as a group.



to the mind in comprehending the genus *simul et semel*, he avoids talking about mental concepts. Yet he does not deny that we consider things in separation from each other, for example, a quality from its substance, a quality from other qualities, a line from its surface or subject, and so forth.<sup>86</sup> This is indeed what the mind does in comprehending *simul et semel* all individual qualities without their substances, or all individual lines without their matter. We do not abstract or separate things but simply grasp things under a particular aspect, ignoring other aspects. In his edition of Nizolio's work, Leibniz writes here that such a position — abstracting is nothing but considering an object without considering other objects — “has lately been inculcated in many by Thomas Hobbes.”<sup>87</sup>

We thus see Nizolio tackling both horns of the dilemma at once. Are categorizations the product of our mind, or are they already out there, waiting as it were to be “comprehended” by an act of the mind? Redefining universals in terms of genera — that is, identifying universals with the classes of objects themselves rather than with mysterious essences that have to be dug up through a laborious process of abstraction — Nizolio thinks he can claim that we can categorize things in many different ways. To use a modern example, we may group bats with bats (one sort) but also with birds (aspect of flying), or, alternatively, with whales and dolphins (making use of echolocation), depending on our questions and interests, but the classes, constructed by the human mind, are always part of reality. It looks like a shrewd alternative to the mind-world identity as defended by moderate realists such as Thomas Aquinas, according to whom the mind and the world are structurally identical.<sup>88</sup> Nizolio simply skips the whole process of transforming bodily information into an immaterial state by way of sensible and intelligible species, nor does he offer an Ockhamist account in terms of intuitive and abstract cognition. But without further explanation, his notion of mental comprehension seems a lot more mysterious than the scholastic process of abstraction, although he can claim that his account does not introduce mysterious entities such as universals.

## 6. SCIENCE, PROOF, AND ARGUMENTATION

As I have explained, one of Nizolio's aims is to bring science in direct contact with the world of concrete things by lifting the veil of scholastic categories,

<sup>86</sup>Nizolio, 1956, 2:84 (3.7).

<sup>87</sup>Ibid., 90 (3.7): “Quod abstrahere, si sano sensu accipiatnr nihil aliud sit, quam considerare unam rem, alia non considerata, pluribus hodie inculcavit Thomas Hobbes.”

<sup>88</sup>Pasnau, 295–305; Perler, 135–53.

transcendentals, and universals that had blocked, so he thinks, our view of the world.<sup>89</sup> One of the reasons why universals had been postulated, Nizolio writes, was the idea that science could not be about individuals since they are corruptible;<sup>90</sup> hence, the need for a stable, eternal structure of essences. But if science is about collections of individual objects, does that not make scientific truth dependent on their actual existence here and now? Indeed, one of Nizolio's principal sources, Agricola in his *De inventione dialectica*, said that in order for knowledge and definitions to be possible, things must exist now or in the future.<sup>91</sup> Nizolio must argue that his universals, the genera as classes of things, can be the object of statements that for their truth are not dependent on the actual existence of individual members of the classes, and indeed we find him making the claim that classes themselves are "eternal and immortal."<sup>92</sup> Classes comprise not only actual members of a class here and now but also those of the past and the future. It is not easy to reconcile this claim with other strands in his thinking as analyzed above, such as the flexibility in the mind's grasp of universals and the equation of a class or a genus with its individuals. Leibniz therefore seems correct in remarking that Nizolio cannot get out of this so easily.<sup>93</sup> Nizolio must either admit that induction never gives us certain knowledge (we have experience only of a limited number of cases) or that the mind's *comprehensio* of the universal is not based on individual cases at all. Nizolio was not yet ready to take the first horn of the dilemma, but the other horn would come close to reifying the genus, something which, of course, would go wholly against the spirit of his reform. One way out of the dilemma would perhaps be to view universals as meanings that can be fixed by definition. Arguably, such an approach, by which the extension of a universal or general idea is defined by its content, was developed by Locke, but this is clearly not a feasible option for Nizolio.<sup>94</sup>

A further consequence of his extensional approach is to redefine the nature of syllogisms. In arguing syllogistically, Nizolio says, we move from wholes to parts, rather than from universals to particulars, and — in the case

<sup>89</sup>Nizolio, 1956, 1:189–93 (2.8).

<sup>90</sup>*Ibid.*, 75–76 (1.7).

<sup>91</sup>Agricola, 2.8, quoted by Nizolio, 1956, 1:131 (2.1). For Melanchthon, see n84 above.

<sup>92</sup>Nizolio, 1956, 1:76 (1.7).

<sup>93</sup>*Ibid.*, 87n5 (1.7). For more on Leibniz's response, see section 8 below.

<sup>94</sup>Locke, 1979, 419–20 (*Essay* 3.3.19): "so the essences of those species are preserved whole and undestroyed, whatever changes happen to any or all of the individuals of those species." Locke too had problems accommodating the more traditional view of essences as being ingenerable and incorruptible with a conventionalist and, as Jolley calls it, "deflationary" view; see Jolley, 143–68, at 153; Aaron, 21–41, also points to such strands in Locke (see esp. at 32); see also Newman, esp. 343–46.

of induction — from parts to wholes rather than vice versa.<sup>95</sup> Proving something is basically showing that a part (an individual, a class) is part of a bigger group, rather than showing that a genus can be predicated of each of its members. One proves that Socrates is a living being by taking as premises that the class of living beings contains the class of human beings, and the class of Socrates (just one member) is part of the class of human beings, as if one were drawing increasingly smaller concentric circles. Perhaps Nizolio thought (erroneously) that such terminology of classes *containing* other classes or *being contained* in other classes would suppress a belief in universals — although, of course, one can be a nominalist concerning universals but still defend the attribution of essential predicates to things.<sup>96</sup>

In any case, he rejects the principles of *dici de omni et nullo* of Aristotelian logic, which also played an important role in Ockham's logic: "I say that correctly formed syllogisms do not derive their power of concluding and proving in a necessary way from the two principles that I mentioned, that is, *dici de omni* (predicated of all) et *dici de nullo* (predicated of none), but from this, that is, that one or more parts of some discrete or continuous whole exist or do not exist, or are contained or are not contained, in some discrete or continuous whole, and that for this reason narrow genera always exist or not exist, or are contained or not contained, in some other wider genera."<sup>97</sup> According to these principles, rejected by Nizolio, nothing is taken under the subject of which the predicate is not also asserted (*de omni*), or the predicate is denied of whatever the subject is affirmed (*de nullo*).<sup>98</sup> Only the moods of the first figure of the syllogism — in which the middle term is subject of one premise and predicate of the other — are immediately regulated by this principle, those of the second and third only mediately. Nizolio does not show any interest in syllogistics as such, and, unlike his fellow anti-Aristotelian Valla, does not review the different figures and moods.<sup>99</sup> His point is that syllogistic reasoning is based on a comparison

<sup>95</sup>Nizolio, 1956, 1:78 (1.7).

<sup>96</sup>A good example is Buridan: on whom, see Klima.

<sup>97</sup>Nizolio, 1956, 1:78–79 (1.7): "Non inquam a duobus his quae dixi, principiis, hoc est, non ab eo quod est dici de omni et dici de nullo, syllogismi recte facti habent vim suam concludendi et probandi necessario, sed ab eo, quod una vel plures partes alicuius totius discreti vel continui, sunt vel non sunt, continentur vel non continentur, in toto aliquo discreto vel continuo, atque adeo ab eo, quod genera minora semper sunt vel non sunt, continentur vel non continentur in aliis quibusdam majoribus generibus." Cf. *ibid.*, 2:144 (4.2).

<sup>98</sup>Aristotle, 1:41 (*Analytica priora* 25b32–5). See Ockham, 1974, 363. On *dici de omni et nullo* in Ockham, see Adams, 1:439–45.

<sup>99</sup>Valla, 1:278–300; see Nauta, 239–68; Mack, 1993, 84–92; *De censura veri* in Vives, 3:142–84 (on which, see Mack, 2008, 233).

of classes of wider or smaller scope rather than predicating universal features of all individuals of a class.

## 7. RHETORIC: *RES* AND *VERBA*

Having rejected universals, Nizolio thinks he has put dialectic and metaphysics, in which universals play a central role, in their place. Rhetoric, if properly defined, is the queen of arts. Again, Nizolio is more radical here than his humanist predecessors. Valla had subordinated dialectic to rhetoric, but still conceded a small preparatory stage to the former. Agricola had defined dialectic as the art of speaking convincingly or plausibly (*probabiliter*) about any subject, as suitably as possible.<sup>100</sup> Most humanists tried to erode the boundary between dialectic and rhetoric, but did not aim at completely dissolving it. Nizolio wants to go further, broadening the scope of both logic and rhetoric such that they come down to much the same thing. Once this is established, the way would be clear to argue, as many humanists had already done, that philosophy is essentially a rhetorical subject, and that we must return to the fusion of rhetoric and philosophy, of eloquence and reason, as defended and propagated by Cicero. With this aim in mind, Nizolio distinguishes the "false logic" of the pseudophilosophers from the "true logic," which he defines as the art of speaking well about whatever kind of subject. It is the art that concerns all kinds of communication: discussing, disputing, speaking, and discoursing on all types of questions and about all kinds of subjects, written or spoken.<sup>101</sup> It is then a short step to identify this true logic with rhetoric, which Nizolio claims is broader than the specialized field of forensic oratory. Following Cicero and Quintilian, Nizolio defines rhetoric as the art of speaking well.<sup>102</sup> Having broadened both disciplines in this way, Nizolio equates logic (or dialectic) with rhetoric. The two disciplines do not essentially differ in their subject-matter (they treat all subjects), their questions (they both treat general and more specific questions, that is, theses and hypotheses), means of argumentation (both use syllogisms, induction, enthymemes, and example), and techniques (they both use the question-and-answer technique) and their tasks.<sup>103</sup>

<sup>100</sup>Valla, 1:175–77; Agricola, 206 (and cf. 193). On the meaning of *probabiliter* in Agricola, see Mack, 1993, 169–73; see also Rummel, 169–77; Wels, 187–94.

<sup>101</sup>Nizolio, 1956, 2:91 (3.8).

<sup>102</sup>Ibid., 50 (3.5); cf. ibid., 38 (3.3).

<sup>103</sup>Ibid., 50 (3.5).

With this equation between dialectic and rhetoric in place, it must have been tempting for Nizolio to equate rhetoric with philosophy *tout court*, but he sticks to the Ciceronian distinction between philosophy as knowledge and wisdom and rhetoric as the verbal expression of this knowledge. The two, however, are intimately connected. “The science of wise thinking” and “elegant speaking” are two sides of the same coin, and Nizolio ardently defends this union of brain and tongue, of reason and eloquence, of philosophy and rhetoric.<sup>104</sup> The two are not separate areas, but one organic whole, just “as body and soul constituting one living being.” In Cicero’s own words, duly quoted by Nizolio: “Every speech consists of matter and words, and the words cannot fall into place if you remove the matter, nor can the matter have clarity if you withdraw the words.”<sup>105</sup> The assumption is that clear and transparent language is a *sine qua non* for clear thinking: indeed, the assumption, as we have seen above, was explicitly formulated by Nizolio as one of the essential conditions for “true and correct philosophizing,” alongside a profound knowledge of the classical languages and their literature, as well as of grammar and rhetoric.<sup>106</sup>

Does such a position result in what some scholars have called, in a rather grand phrase, “the verbalization of the world”?<sup>107</sup> For if things can only be grasped and brought to light and understood if we use the right language — which is the language of the common people, developed and refined by the great authors of classical antiquity — does this not imply that our view of the world is somehow shaped by language? If knowledge and reasoning are based on the way we comprehend individuals as members of groups, and if this act of *comprehensio* is also an oratorical act, as Nizolio explicitly argues, then language seems to determine the ways in which we categorize the world. Such an intimate connection between words and things may render it difficult to distinguish between *res* and *verba*. And, indeed, scholars have argued that the line between the two becomes blurred in many a humanistic text. Discussing Erasmus’s *De copia*, Terence Cave, for example, has argued: “*Res* are neither prior to words as their ‘origin,’ nor are they a productive residue which remains after the words cease. *Res* and *verba* slide together to become ‘word-things’; the notion of a single domain (language) having

<sup>104</sup>Cicero, 1976, 2:45–47 (*De oratore* 3.15.57), 47–49 (16.59–61), 57 (19.69), 59 (19.72–73), 113 (35.142–43), all cited by Nizolio, who was probably much aided by his own *Observations in M. T. Ciceronem*; cf. Wesseler, 27–29; Rummel, 175.

<sup>105</sup>Nizolio, 1956, 2:31–33 (3.3); 1:82 (1.7) (quotation from Cicero, 1982, 17 [*De oratore* 3.5.19]). For a good discussion of Cicero’s view on *res* and *verba*, see Fantham, 237–66.

<sup>106</sup>Nizolio, 1956, 1:22–23 (1.1).

<sup>107</sup>See n109 for references.

a double aspect replaces that of two distinct domains, language and thought."<sup>108</sup>

In a similar vein some scholars, particularly in the German-speaking world, have interpreted Nizolio's position in terms of a "verbalization or linguification of the world [*Versprachlichung der Welt*]," "a unity of word and thing," and "a comprehensive speech act [*Sprechakt*]" that has an essentially cognitive function and aim, or perhaps a "pre-cognitive" function: in comprehending things *semel et simul* we first form groups of things in a kind of intuitive act, and only at a second stage do we use these groups or categorizations in our discourses, definitions, and proofs.<sup>109</sup> This interpretation, however, is too far-fetched. Admittedly, Nizolio gives cause for such a reading, as he does not explain how our grasp or comprehension of things as one group or class relates to the rhetorical figure of synecdoche or *intellectio*: does the latter shape the way in which we make our categorizations, or is it merely an outer verbalization of the inner mental act of comprehension? But it goes too far to suggest or to imply that he equates the act of thinking with its linguistic expression. Indeed, it would be very strange to say that our capacity to grasp the whole class of individual dogs when we recognize, for example, that Bello is a dog, is the same as the linguistic expression "Bello is a dog," or is constituted by it. In general, Nizolio assumes that words refer to things. Indeed, he makes it quite clear that we should not mix up words and things, for it is precisely mistaking words for things that had led to the postulation of universals by the "pseudophilosophers."<sup>110</sup>

<sup>108</sup>Cave, 21. Cf. Frank, 77: "kein äusserliches Denominationsverhältnis, sondern eine innere Beziehungsrelation"; "die Rhetorisierung der aristotelischen Kategorienlehre als neues, durch die Sprache vermitteltes Wirklichkeitsverständnis."

<sup>109</sup>Otto, 509–11; Wesseler, 124–47, and esp. at 143; Thieme, preface to Nizolio, 1980, 15–16; Hidalgo-Serna.

<sup>110</sup>Otto does not deny this, but argues (512) that for Nizolio "the similarity between things is the similarity between words," and calls this "*nominalismus redivivus*": singular man is part of the whole of the general word *man*: "The similarity between beings becomes a purely linguistic similarity [*rein sprachlichen Ähnlichkeit*] between the singular and plural term." Taken literally, this would mean that in "bat is a mammal" the word *bat* stands for the general term *bat*, and that this similarity constitutes the similarity between bats. This is confused, and it is not Nizolio's position. (It would lead to an extreme form of linguistic idealism, but Nizolio clearly assumes that words refer to things.) Moreover, it is difficult to square with Nizolio's account of the predicables. What is the similarity between the words *ant* and *man*, when we see or take them as one class in that both take precautions for the future (to use Nizolio's example again)? Cf. Breen's introduction to Nizolio, 1956, xlviii, on the influence that the debate with Maioragio might have had on Nizolio in this, referring to Pico's celebrated letter to Barbaro on matter and form in philosophy and on styles of philosophizing.

This would still leave open the possibility that *comprehensio* precedes discursive reasoning, but there is no textual evidence in Nizolio for a distinction between, on the one hand, the creative, rhetorical act of *comprehensio* — in which “word and thing are unified” and in which “the world is grasped in its historicity and contingency” — and, on the other hand, the “rational, scientific and logical” thought that would follow upon such an intuitive understanding.<sup>111</sup> Indeed, Nizolio explicitly argues that synecdoche is used in definitions, syllogisms, proofs, and arguments, as well as in other kinds of forms of language.<sup>112</sup> This suggests that there is no two-step process of (1) a pre-rational comprehension-synecdoche and (2) a rational-logical processing of the intuitive insights gained in step 1. What such a statement does imply, however, is that the mental grasping and the verbal expression of what we grasp are interlinked. While it goes too far to ascribe to Nizolio a verbalization of thought, it is perhaps not too far-fetched to speak of a rhetoricization of knowledge.

#### 8. CONCLUDING REMARKS: NIZOLIO'S PLACE IN THE HISTORY OF PHILOSOPHY

What is the significance of Nizolio's attempt to replace the doctrine of universals and the concomitant notion of abstraction with an extensional approach in which classes are groups of individuals grasped simultaneously and comprehensively by the mind? Historically, the attempt failed, as Nizolio's philosophy — to paraphrase Leibniz — suffered suffocation almost as soon as it saw the light.<sup>113</sup> While Nizolio's humanist work on Cicero enjoyed immense popularity, his attack in *De principiis* on universals and other basic tenets of Aristotelian-scholastic philosophy remained without much response, unlike the even more virulent attacks by Peter Ramus, which would soon provoke widespread controversy.

But it would be wrong to judge his radical critique as philosophically irrelevant for that reason. With hindsight we can interpret his critique of the scholastic conceptual armament as aiding, however modestly, in the erosion of a once-powerful paradigm, thereby helping to create intellectual space for

<sup>111</sup>Such a picture is presented by Wesseler, 59–147. He uses the same crude dichotomy to characterize scholastic thought versus humanist rhetoric. *Ibid.*, 105–23, also argues that *exemplum* plays an important role in Nizolio's account of *comprehensio*, but this goes against Nizolio's own account, according to which example and enthymeme are not independent forms of argumentation: see Nizolio, 1956, 2:137–38 (4.2).

<sup>112</sup>*Ibid.*, 80 (3.7).

<sup>113</sup>Leibniz, 1966, 405: “Philosophia Nizoliana prope in ipso partu suffocationem aegre effugit.”



the emergence of new developments in science and philosophy. It seems too much to claim, as Cassirer did, that Nizolio was “the culmination of the empirical criticisms of Aristotelian philosophy,” since Nizolio did not directly contribute to natural philosophy himself.<sup>114</sup> Yet, standing in a longer tradition of anti-Aristotelianism, Nizolio's criticism of universals, essences, and abstraction may be regarded as a necessary preparatory step in the slow demise of the Aristotelian paradigm. In taking individuals to be grouped in classes on the basis of similarity grasped by the human mind, Nizolio thinks he has no use for substantial forms and essences, let alone divine archetypes. In this he is even more radical than Valla — who still referred, though incidentally, to the Augustinian notion of divine illumination and was ambiguous about universals — and certainly more radical than Agricola (a realist of some sort), Vives, and Melanchthon.<sup>115</sup> Nizolio is wholly secular in his approach, omitting any reference to a divine mind whose ideas would function as eternal archetypes, equating God with nature (*a Deo sive a natura . . . opifice*), and stating that God and all divine things are truly *res naturales*.<sup>116</sup>

His horizontal, lean ontology of only individual substances and qualities, grouped in classes, has clear affinities with Ockhamist nominalism, and this brings us to a second point. It may be tempting to associate his idea — that the real universals are genera that the human mind forms in a comprehensive act — with Ockham's theory of concepts as intellectual acts in which the act itself stands for a thing known. However, as we have seen, many of his claims do not fit in with the Ockhamist program of establishing a mental language of concepts as grounding spoken and written language. Nizolio himself invokes consistently the rhetorical notion of *comprehensio* rather than Ockham's theory. Nizolio does not speak about concepts in the mind that have meaning by nature — an important Aristotelian idea that undergirds Ockham's account — or about concepts as singular entities.<sup>117</sup> Thus, while for Nizolio universals are out there, for Ockham universals are concepts, singular entities that can stand for the individuals resembling the concept and each other. But as we have seen, Nizolio's notion of universal is ambiguous, for while he clearly wants to de-essentialize Aristotelian philosophy by defining universals in terms of classes, the cognitive act by which the individuals are grasped as a class might also be assigned the role of universal. And in spite of his rejection of any kind of reification or hypostatization, he also speaks of universals as being “eternal”

<sup>114</sup>Cassirer, 1:149. See n8 above.

<sup>115</sup>Valla, 1:19; cf. nn19, 20, and 73 above.

<sup>116</sup>Nizolio, 1956, 1:59 (1.6); 2:45 (3.4).

<sup>117</sup>Ockham, 1990, 41–45; Panaccio, 119–43.

and “immortal.” His basic conviction remains firm, however: individuals and groups (*singillatim aut universe sive in universum*) should be the object of knowledge and scientific statements, rather than forms and predicables being reified or hypostatized. It is therefore not surprising that Nizolio puts experience and sense perception on his list of the true principles of “correct philosophizing.”

Thus, Nizolio’s basic conviction is that hypostatization and reification, rooted in a misunderstanding of common language, have bedeviled philosophy, and have impeded a fresh look at the world of concrete, empirical things. This has led scholars to link him not only with Ockham, to whom Nizolio himself refers, but also with a modern philosopher such as Gilbert Ryle (1900–76), who thought that universals are the product of a misunderstanding of terms.<sup>118</sup> For Ryle the question of what sort of objects universals are is a “bogus question.”<sup>119</sup> Universals such as justice and rationality are not objects in the way in which dogs and tables are objects, and general nouns and adjectives are not proper names that refer to a particular object. It is the grammatical form of such propositions, however, that might tempt us (“us” philosophers, Ryle adds) into thinking, erroneously, that universals denote objects, while in fact they do not. Hence, philosophy is the reformulation of such “systematically misleading expressions.” While such a comparison may indeed be used as a hermeneutic tool to recognize and tease out the philosophical relevance of ideas of a humanist such as Nizolio, it is obvious that Ryle’s analysis in terms of categories and category mistakes is fundamentally different from Nizolio’s anti-realist argument, which focuses on universal terms as collective terms, and on the correct understanding of synecdoche.

A philosopher who did see himself as a sort of ally of Nizolio was Leibniz, the editor of the humanist’s work. Leibniz regarded Nizolio as a nominalist, and for this reason “all the more appropriate for our times,” since “nothing is truer” than the “rule” of the nominalists “that everything in the world can be explained without any reference to universals and real forms.”<sup>120</sup> However, Nizolio also made “many and great errors,” and a very serious one concerns precisely the central idea of universals as nothing more than all singulars taken simultaneously and collectively.<sup>121</sup> According to

<sup>118</sup>Copenhaver and Schmitt, 355: “When Ryle claimed that the doctrine of universals arises from a grammatical mistake, his real ally in heresy was not Erasmus but the Ciceronian Nizolio, for whom synecdoche was the most misleading of all expressions.”

<sup>119</sup>See Ryle.

<sup>120</sup>Leibniz, 1969, 128; Leibniz, 1966, 428.

<sup>121</sup>For what follows, see Leibniz, 1969, 128–30; Leibniz, 1966, 430–31.

Leibniz, the universal is not an aggregate or a “collective whole,” but a “distributive” whole or logical whole: “when we say every man is an animal or all men are animals, the acceptation is distributive; if you take that man (Titius) or this man (Caius), you will discover him to be an animal.”<sup>122</sup> For if the collective whole of all human beings is the same as the genus man, we would get absurd propositions such as “the whole genus is an animal,” or “for if they are the same, we may substitute the whole genus man in the proposition that all men are animals or every man is an animal.” The concept man as being a rational animal is independent from the number of instances that we find in the world. Even if there were no human beings on earth, it would still be true to say that man is a rational animal.<sup>123</sup> For the young Leibniz of the 1670 preface to his Nizolio edition, the meaning of a concept is not the same as its extension.<sup>124</sup>

Moreover, Nizolio's position does not leave much independent work for the mind to do: the mind simply grasps a collective whole, and in arguing and proving adds and subtracts classes in arithmetical fashion. But Leibniz wants to assign a much more active role to the mind: it adds its own universal propositions to inductively gained data so that we can arrive at truly universal knowledge. From Nizolio's position on universals, “it would follow that we could attain no knowledge through demonstration — a conclusion which Nizolio actually draws — but only through collecting individuals or by induction.”<sup>125</sup> But induction can never result in “true universality.” Without discussing Leibniz's position in more detail, one might see these early remarks, provoked by the reading of Nizolio, as early anticipations of his more mature view of the *Discours de métaphysique* from 1686, in which concepts are said to be “so complete that it is sufficient to contain and allow us to deduce from it all the predicates of the subject to which this notion is attributed.”<sup>126</sup> Nizolio — among many other thinkers,

<sup>122</sup>This is more or less what medieval logicians called “confused supposition”: in “every man is an animal,” “man” supposes confusedly and distributively (*confuse et distributive*) because it is used for any man, as Peter of Spain, 83, said.

<sup>123</sup>Cf. n93 above.

<sup>124</sup>For Leibniz's criticism of Nizolio on this point, see Cassirer, 1:151, 2:133–35; Tillmann, 58–63. What Ong, 204, said about Ramus may apply to Nizolio as well: Ramus had “overlooked the elemental difference between the comprehension and extension of a term, and to view increase in comprehension by the addition of specifying notes . . . as quite the same thing as grouping of individuals . . . within a genus.” The meaning of a term seems to be defined here by its extension.

<sup>125</sup>Leibniz, 1969, 129; Leibniz, 1966, 430–31.

<sup>126</sup>Leibniz, 1989, 41.

of course — was important in order for Leibniz to develop his own thoughts about concepts and predication.

Leibniz was not only critical about Nizolio. In the same preface he praises him for having recognized the importance of a clear, non-technical style in philosophy, and he defends the principle that “whatever cannot be explained in popular terms is nothing and should be exorcised from philosophy as if by an incantation, unless it can be known by immediate sense experience.”<sup>127</sup> Like Nizolio, Leibniz thinks that the “passion for devising abstract words has almost obfuscated philosophy for us entirely.” But while sharing Nizolio’s plea for a common language in philosophizing, Leibniz has omitted elegance from the three praiseworthy marks of speech (clarity, truth, and elegance), “since our discussion concerns philosophical discourse and the style that befits it.” Not surprisingly, he considered Nizolio’s principles of correct philosophizing, which included knowledge of classical languages and their literature as well as grammar and rhetoric, “principles of speech rather than of thought.”<sup>128</sup> Thus, although he presented Nizolio as an excellent guide toward a “sober, proper, natural, and truly philosophical way of speaking,” his omission of elegance from philosophical style suggests that the Ciceronian link between *verba* and *res*, style and content, elegance and clarity-truth, was no longer felt as intimate and intrinsic in the way in which humanists such as Nizolio had done.<sup>129</sup>

Nizolio’s project clearly had its philosophical limitations. But, as this article has suggested, it gains in interest when we consider it as an example of what Menn described as the “bold experiments” of the anti-Aristotelians, experiments that “with hindsight” we may see as preparing “the way for the emergence of mechanical philosophy and science.”<sup>130</sup> In stressing observation and sense perception while rejecting what he considered to be

<sup>127</sup>For this and the following quotations see Leibniz, 1969, 124, 126, 121–22; Leibniz, 1966, 414, 417, 409–10. See also Leibniz, 1966, 423 (not in Leibniz, 1969): “But I have not found anyone who has so penetrated the essence of scholastic terms [or: who has cut back scholastic terms] in other areas of philosophy as Nizolio has done in logic. Though he has hitherto been little known, I think he deserves all the more to stand as a model for the reform of philosophical terminology” (“Qui tamen terminos in Scholis receptos sic ad vivum in caeteris Philosophiae partibus reseuerit, ut fecit in Logica Nizolius noster, nondum comperi. Nizolium igitur, quo hactenus fuit ignoratior, hoc magis dignum putavi, qui in exemplum dictionis philosophicae reformatae proponatur”).

<sup>128</sup>Leibniz in Nizolio, 1956, 1:30 (1.1): “loquendi potius quam sentiendi principia.”

<sup>129</sup>For Leibniz, 1969, 122, elegance is only useful for “securing attention, in moving minds, and in impressing things more deeply on the memory.” Cf. Wels, 87n146; Fennes, 13–79, esp. 13–27; Laerke.

<sup>130</sup>Menn, 47. For the full quotation, see n5 above.

the essentialist and fixed categories of the Aristotelian-scholastic system, Nizolio aimed at making room for the inquisitive human mind to categorize the world with flexible classes. And it is these classes, as real universals, that should be the true subject matter of general statements to be qualified and modified as our knowledge advances.

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